



PTO/SB/01A (10-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☒ The attached application, or  
☐ Application No. \_\_\_\_\_, filed on \_\_\_\_\_,  
☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

## FULL NAME OF INVENTOR(S)

Inventor one: Adrian P. Sparks

Signature: A.P. Sparks

Citizen of: United Kingdom

Inventor two: Alan R. Briggs

Signature: A.R. Briggs

Citizen of: United Kingdom

Inventor three: Frederick J. Lalonde

Signature: \_\_\_\_\_

Citizen of: Canada

Inventor four: H.D. Wade Macleod

Signature: \_\_\_\_\_

Citizen of: Canada

☒ Additional inventors are being named on 1 additional form(s) attached hereto.

**Burden Hour Statement:** This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED  
MAR 08 2002  
Technology Center 2600

PTO/SB/01A (10-00)

Approved for use through 10/31/2002. OMB 0851-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☒ The attached application, or  
☐ Application No. \_\_\_\_\_, filed on \_\_\_\_\_,  
☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/ we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**Inventor one: Adrian P. Sparks

Signature: \_\_\_\_\_

Citizen of: United KingdomInventor two: Alan R. Briggs

Signature: \_\_\_\_\_

Citizen of: United KingdomInventor three: Frederick J. LalondeSignature: Frederick J. LalondeCitizen of: CanadaInventor four: H.D. Wade MacleodSignature: H.D. Wade MacleodCitizen of: Canada☒ Additional inventors are being named on 1 additional form(s) attached hereto.

**Burden Hour Statement:** This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to file (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/01A (10-00)

Approved for use through 10/31/2002. OMB 0851-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☒ The attached application, or  
☐ Application No. \_\_\_\_\_, filed on \_\_\_\_\_  
☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including material information which became available between the filing date of the prior application and the National or PCT International filing date of the continuation-in-part application, if applicable; and

All statements made herein of my/own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**Inventor one: Douglas W. FisherSignature: Citizen of: Canada

Inventor two: \_\_\_\_\_

Signature: \_\_\_\_\_

Citizen of: \_\_\_\_\_

Inventor three: \_\_\_\_\_

Signature: \_\_\_\_\_

Citizen of: \_\_\_\_\_

Inventor four: \_\_\_\_\_

Signature: \_\_\_\_\_

Citizen of: \_\_\_\_\_

☐ Additional inventors are being named on \_\_\_\_\_ additional form(s) attached hereto.

Burden Hour Statement: This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is used by the public to be (and the PTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 1 minute to complete. The time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → 

PTO/SB/81 (02-01)

Approved for use through 10/31/2002. MB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number	
Filing Date	
First Named Inventor	SPARKS, Adrian P.
Title	HYBRID PHOTONIC/ELECTRONIC SWITCHING IN A MULTI-CHANNEL NETWORK
Group Art Unit	
Examiner Name	
Attorney Docket Number	9-13528-160US

I hereby appoint:

☐ Practitioners at Customer Number  → 

Place Customer  
Number Bar Code  
Label here

☒ Practitioner(s) named below:

Name	Registration Number
Robert J. Seas, Jr.	21,092
Richard C. Turner	29,710

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number  → 

Place Customer  
Number Bar Code  
Label here

OR

☒ Firm or  
Individual Name

SUGHRUE, MION, ZINN, MACPEAK &amp; SEAS, PLLC

Address

2100 Pennsylvania Avenue, N.W.,

Address

City

Washington

State

D.C.

Zip

20037-3213

Country

United States of America

Telephone

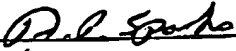
(202) 293 7060

Fax

(202) 293 7860

I am the:

☒ Applicant/Inventor.
☐ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).
**SIGNATURE of Applicant or Assignee of Record**

Name	Adrian P. Sparks
Signature	
Date	15 November 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 5 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → 

PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number	
Filing Date	
First Named Inventor	SPARKS, Adrian P.
Title	HYBRID PHOTONIC/ELECTRONIC SWITCHING IN A MULTI-CHANNEL NETWORK
Group Art Unit	
Examiner Name	
Attorney Docket Number	9-13528-160US

I hereby appoint:

☐ Practitioners at Customer Number 

OR

☒ Practitioner(s) named below:Place Customer  
Number Bar Code  
Label here

Name	Registration Number
Robert J. Seas, Jr.	21,092
Richard C. Turner	29,710

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number 

OR

Place Customer  
Number Bar Code  
Label here☒ Firm or  
Individual Name

SUGHRUE, MION, ZINN, MACPEAK &amp; SEAS, PLLC

Address

2100 Pennsylvania Avenue, N.W.,

Address

City

Washington

State

D.C.

Zip

20037-3213

Country

United States of America

Telephone

(202) 293 7060

Fax

(202) 293 7860

I am the:

☒ Applicant/Inventor.
☐ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).
**SIGNATURE of Applicant or Assignee of Record**

Name

Alan R. Briggs

Signature

A. R. Briggs

Date

6th November 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 5 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → 

PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0681-0035

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number

Filing Date

First Named Inventor

SPARKS, Adrian P.

Title

HYBRID PHOTONIC/ELECTRONIC SWITCHING IN A  
MULTI-CHANNEL NETWORK

Group Art Unit

Examiner Name

Attorney Docket Number

9-13528-160US

I hereby appoint:

☐ Practitioners at Customer Number  →Place Customer  
Number Bar Code  
Label here☒ Practitioner(s) named below:

Name	Registration Number
Robert J. Seas, Jr.	21,092
Richard C. Turner	29,710

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number  →Place Customer  
Number Bar Code  
Label here☒ Firm or  
Individual Name

SUGHRUE, MION, ZINN, MACPEAK &amp; SEAS, PLLC

Address

2100 Pennsylvania Avenue, N.W.,

Address

City

Washington

State

D.C.

Zip

20037-3213

Country

United States of America

Telephone

(202) 293 7060

Fax

(202) 293 7860

I am the:

☒ Applicant/Inventor.☐ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).**SIGNATURE of Applicant or Assignee of Record**

Name

Frederick J. Lalonde

Signature



Date

Nov. 5, 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 5 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/81 (02-01)

Approved for use through 10/31/2002, OMB 0851-0035

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number	
Filing Date	
First Named Inventor	SPARKS, Adrian P.
Title	HYBRID PHOTONIC/ELECTRONIC SWITCHING IN A MULTI-CHANNEL NETWORK
Group Art Unit	
Examiner Name	
Attorney Docket Number	9-13528-160US

I hereby appoint:

☐ Practitioners at Customer Number 

OR

☒ Practitioner(s) named below:Place Customer  
Number Bar Code  
Label here

Name	Registration Number
Robert J. Seas, Jr.	21,092
Richard C. Turner	29,710

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number 

OR

Place Customer  
Number Bar Code  
Label here☒ Firm or  
Individual Name

SUGHRUE, MION, ZINN, MACPEAK &amp; SEAS, PLLC

Address

2100 Pennsylvania Avenue, N.W.,

Address

City

Washington

State

D.C.

Zip

20037-3213

Country

United States of America

Telephone

(202) 293 7060

Fax

(202) 293 7860

I am the:

☒ Applicant/Inventor.☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

**SIGNATURE of Applicant or Assignee of Record**

Name

H.D. Wade Macleod

Signature

H.D. Wade Macleod

Date

November 1 / 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 5 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → 

PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0851-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it display a valid OMB control number.

**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number	
Filing Date	
First Named Inventor	SPARKS, Adrian P.
Title	HYBRID PHOTONIC/ELECTRONIC SWITCHING IN A MULTI-CHANNEL NETWORK
Group Art Unit	
Examiner Name	
Attorney Docket Number	9-13528-160US

I hereby appoint:

☐ Practitioners at Customer Number  → 

Place Customer Number Bar Code Label here

☒ Practitioner(s) named below:

Name	Registration Number
Robert J. Seas, Jr.	21,092
Richard C. Turner	29,710

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number  → 

Place Customer Number Bar Code Label here

OR

☒ Firm or Individual Name **SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC**

Address

2100 Pennsylvania Avenue, N.W.,

Address

City

Washington

State

D.C.

Zip

20037-3213

Country

United States of America

Telephone

(202) 293 7060

Fax

(202) 293 7860

I am the:

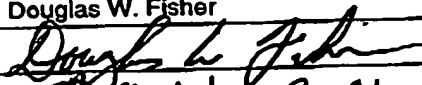
☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).
**SIGNATURE of Applicant or Assignee of Record**

Name

Douglas W. Fisher

Signature



Date

25<sup>th</sup> October 2001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ Total of 5 forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.